GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:150
ANSWERED ON:09.07.2014
SAFETY AUDIT OF ATOMIC POWER PLANTS
Nayak Shri B.V.

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) whether periodic safety audit of all atomic power plants in the country is being carried out;

(b) if so, the details thereof;

(c) whether the Government has conducted any survey in the areas surrounding atomic plants to ascertain the health and environmental implications; and

(d) if so, the details and the outcome thereof?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

(a) & (b) Yes Sir. Periodic safety audit of all atomic power plants in India is carried out by the Atomic Energy Regulatory Board (AERB). All Nuclear Power Projects (NPP) undergo an elaborate in-depth safety review during all stages, viz. siting, construction, commissioning and operation. After satisfactory review during project stage, AERB issues operating licence to an NPP for a period of five years. During the licence period, safety performance of an operational NPP is continuously monitored for compliance with regulatory guidelines. A consolidated safety assessment of the plant is undertaken while renewing the operating licence after every five years. During the project stage of a power plant, quarterly regulatory inspections and during operation of a power plant, regulatory inspections are carried out by AERB once every six months. These inspections are conducted in addition to the process of periodical safety review of all plants.

(c) & (d) Yes Sir. For all Nuclear Power Plants in the country, environmental impact assessments are carried out from both radiological and non-radiological (conventional) safety considerations. These assessments are reviewed by AERB and Ministry of Environment and Forests (MoEF) before the necessary siting and environmental clearances to set up the NPP are given by AERB and MoEF, respectively. Prior to and during operating phase, environmental surveillance around Nuclear Power Plant sites is carried out by an Environmental Survey Laboratory (ESL) set up by the Health, Safety and Environment Group of Bhabha Atomic Research Centre (BARC). The reports of ESL are reviewed by AERB. The ESL surveillance programme includes comprehensive monitoring of the radionuclides in aquatic, atmospheric and terrestrial domains upto a distance of 30-km around the NPP site. As a part of this surveillance, radiation dose to members of the public near the NPP site is also estimated. Then radiation dose to public is a very small fraction of the natural background radiation existing everywhere, even in the absence of a nuclear installation. At these levels, there is no likelihood of any adverse health consequences.